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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/801,242	03/15/2004	Andy L. Lee	306812006200	2030

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ALTERA c/o MOFO SF
425 MARKET STREET
SAN FRANCISCO, CA 94105

EXAMINER

TAN, VIBOL

ART UNIT	PAPER NUMBER
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2819

DATE MAILED: 05/20/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/801,242

Applicant(s)

LEE ET AL.

Examiner

Vibol Tan

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 15 March 2004.
2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-33 is/are pending in the application.
4a) Of the above claim(s) _____ is/are withdrawn from consideration.
5) ☐ Claim(s) _____ is/are allowed.
6) ☒ Claim(s) 1, 21 and 33 is/are rejected.
7) ☒ Claim(s) 2-20 and 22-32 is/are objected to.
8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 3/15/04.
4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1, 21 and 33 are rejected under 35 U.S.C. 103(a) as being unpatentable over Pedersen et al. (U. S. PAT. 6,323,680) in view of New (U. S. PAT. 6,154,053).

In claim 1, Pedersen et al. teaches all claimed features in Figs. 5, 6, 10 and 11, a logic circuit comprising: a first series of logic elements (30), each logic element having a look-up table (402) and a dedicated adder (800) to implement an arithmetic mode in the logic element; a carry chain (COIN-C1IN) connecting the first series of logic element; with the exception of teaching an initialization circuit connected to the carry chain to initialize the carry chain. However, New teaches in Fig. 6, an initialization circuit (115) connected to the carry chain (CA_i, CB_i) to initialize (114) the carry chain.

Therefore; it would have been obvious to one ordinary skill in the art at the time of the invention was made to combine the teachings of Pedersen et al. with the teachings of New in order to provide a new improved logic circuit that speeds up arithmetic operation and takes traffic off the interconnection network.

In claim 21, Pedersen et al. teaches all claimed features in Figs. 5, 6, 10 and 11, a programmable logic device comprising: an array of logic elements (30) grouped into a plurality of logic blocks (20); a first series of logic elements disposed within a logic block,

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each logic element having a look-up table (402) and a dedicated adder (800) to implement an arithmetic mode in the logic element; a carry chain (COIN-C1IN) connecting the first series of logic element; with the exception of teaching an initialization circuit connected to the carry chain to initialize the carry chain. However, New teaches in Fig. 6, an initialization circuit (115) connected to the carry chain (CA_i , CB_i) to initialize (114) the carry chain.

Therefore; it would have been obvious to one ordinary skill in the art at the time of the invention was made to combine the teachings of Pedersen et al. with the teachings of New in order to provide a new improved logic circuit that speeds up arithmetic operation and takes traffic off the interconnection network.

Method claim 33 corresponds to detailed circuitry already discussed similarly with regard to claim 1.

3. Claims 2-20 and 22-32 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Vibol Tan whose telephone number is (571) 272-1811. The examiner can normally be reached on Monday-Friday (7:00 AM-4:30 PM).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mike J. Tokar can be reached on (571) 272-1812. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



VIBOL TAN
PRIMARY EXAMINER